Title (en)

Filter device, in particular fluid filter

Title (de)

Filtereinrichtung, insbesondere Flüssigkeitsfilter

Title (fr)

Dispositif de filtre, en particulier filtre de liquide

Publication

EP 2808069 B1 20161012 (DE)

Application

EP 14164781 A 20140415

Priority

DE 102013008986 A 20130528

Abstract (en)

[origin: US2014353234A1] A filter device has a cup-shaped filter housing and a filter element disposed in the filter housing. A filter head is connectable to the filter housing and forms a cover for the filter housing. A spring element is provided that is acting on the filter element. The filter head has at least one first form-fit element. The filter housing has at least one second form-fit element for interacting with the at least one first form-fit element. The spring element is arranged such that the filter head and the filter housing for reaching a closed position, in which the at least one first form-fit element and the at least one second form-fit element engage each other, are movable relative to each other axially against the force of the spring element. The spring element clamps the filter element axially between filter head and filter housing in the closed position.

IPC 8 full level

B01D 29/13 (2006.01)

CPC (source: EP US)

B01D 27/08 (2013.01 - US); **B01D 29/13** (2013.01 - EP US); **B01D 29/96** (2013.01 - US); **B01D 35/153** (2013.01 - US); **B01D 35/30** (2013.01 - US); **B01D 35/306** (2013.01 - US); **B01D 46/0004** (2013.01 - US); **B01D 46/0005** (2013.01 - US); B01D 29/21 (2013.01 - US); B01D 46/0015 (2013.01 - US); B01D 2201/0461 (2013.01 - EP US); B01D 2201/301 (2013.01 - US); B01D 2201/4007 (2013.01 - US); B01D 2201/4015 (2013.01 - EP US); B01D 2201/4023 (2013.01 - US); B01D 2201/4046 (2013.01 - US); B01D 2201/4061 (2013.01 - US); B01D 2201/4076 (2013.01 - US); F02M 37/32 (2019.01 - US); F02M 37/42 (2019.01 - US)

Cited by

CN109999554A; CN109758839A

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

EP 2808069 A1 20141203; **EP 2808069 B1 20161012**; CN 104208931 A 20141217; CN 104208931 B 20171020; DE 102013008986 A1 20141204; DE 102013008986 B4 20200423; US 10702812 B2 20200707; US 2014353234 A1 20141204

DOCDB simple family (application)

EP 14164781 A 20140415; CN 201410254962 A 20140528; DE 102013008986 A 20130528; US 201414288994 A 20140528